

Draft Minutes
Scientific Advisory Committee Meeting
October 14, 2020
Department of Forensic Science, Held Electronically

Committee Members Present

Randall E. Beaty
Maureen C. Bottrell
Kathleen Corrado, Ph.D.
Robin W. Cotton, Ph.D.
Leslie E. Edinboro, Ph.D.
Linda C. Jackson
George C. Maha, Ph.D.
Richard P. Meyers, *Chair*
Kristin Schelling
Jami J. St. Clair
Kenneth B. Zercie

Committee Members Absent

Travis Y. Spinder

Staff Members Present

Jeffrey D. Ban, Central Laboratory Director
David A. Barron, Ph.D., Deputy Director
Sabrina S. Cillessen, Physical Evidence Program Manager
Leslie H. Ellis, Human Resources Director
Katya N. Herndon, Chief Deputy Director
James W. Hutchings, Ph.D., Toxicology Program Manager
Amy C. Jenkins, Department Counsel
Alka B. Lohmann, Director of Technical Services
M. Scott Maye, Northern Laboratory Director
Jessica B. Norton, Legal Assistant
Susan Stanitski, Eastern Laboratory Director
Jennifer L. Taylor, Procurement Specialist I, Secretary
Rebecca Wagner, Ph.D., Research Section Supervisor
Robyn B. Weimer, Chemistry Program Manager

Call to Order

As a result of the state of emergency declared by Governor Northam due to COVID-19, the Scientific Advisory Committee conducted the meeting by electronic communication means using the Google Meet platform. The public was permitted to attend and participate via video or audio conference. Directions for public participation were provided on the meeting agenda and posted on Virginia's Town Hall.

Mr. Meyers, the Chair of the Scientific Advisory Committee (“Committee” or “SAC”), called the meeting of the Committee to order at 10:04 a.m. Mr. Meyers requested Ms. Taylor to call the roll to ensure that a quorum was present. Ms. Taylor called the roll as follows:

Mr. Beaty – Present
Ms. Bottrell – Not present at time of roll-call, but joined subsequently
Dr. Corrado – Present
Dr. Cotton – Present
Dr. Edinboro – Present
Director Jackson – Present
Dr. Maha – Present
Mr. Meyers – Present
Ms. Schelling – Present
Mr. Spinder – Not present
Ms. St. Clair – Present
Mr. Zercie – Present

Ms. Taylor advised that a quorum was present.

Adoption of Agenda

Mr. Meyers noted that the first order of business was the adoption of the draft agenda for the meeting, which was previously sent to the Committee members. Director Jackson noted that there were two changes that needed to be made to the agenda: 1) the order of the presentations for the Division of Technical Services (DTS) should be switched so that Dr. Hutchings presents the Toxicology Update first and Ms. Lohmann gives the DTS Update last; and 2) Ms. Lohmann would be presenting the Biology Program Update for Brad Jenkins. Ms. Schelling made a motion to adopt the agenda with those two changes, which was seconded by Mr. Zercie. A roll-call vote was taken, and the members voted as follows:

Mr. Beaty – Yes
Dr. Corrado – Yes
Dr. Cotton – Yes
Dr. Edinboro – Yes
Director Jackson – Yes
Dr. Maha – Yes
Mr. Meyers – Yes
Ms. Schelling – Yes
Ms. St. Clair – Yes
Mr. Zercie – Yes

Adoption of Minutes of the July 14, 2020 Committee Meeting

Mr. Meyers noted the draft minutes from the July 14, 2020 meeting were previously shared with the Committee and asked if there were any proposed changes. Being none, Dr. Edinboro made a motion that the minutes be approved. The motion was seconded by Dr. Corrado. A roll-call vote was taken, and the members voted as follows:

85 Mr. Beaty – Yes
86 Dr. Corrado – Yes
87 Dr. Cotton – Yes
88 Dr. Edinboro – Yes
89 Director Jackson – Yes
90 Dr. Maha – Yes
91 Mr. Meyers – Yes
92 Ms. Schelling – Yes
93 Ms. St. Clair – Yes
94 Mr. Zercie – Yes

95 **Chair's Report**

96 Mr. Meyers indicated that he did not have anything to report.

97 **DFS Director's Report**

98 Agency Updates

99 Director Jackson advised the Committee of the emergency temporary regulations for workplace
100 safety adopted by the Department of Labor and Industry (DOLI) due to COVID-19. She explained
101 that DFS has developed and implemented all required policies, procedures, plans and trainings in
102 accordance with the DOLI standard.

103 Facilities:

104 Director Jackson provided an update on the Central Laboratory facility project. The schematic
105 design phase was completed in September 2020, and the preliminary design phase is in progress
106 with preliminary drawings scheduled to be submitted to the Department of General Services'
107 Division of Engineering and Buildings by January 1, 2021. Because the project transitioned from
108 renovation/expansion of the existing Central Laboratory to construction of an entirely new facility,
109 the budget for the project will be re-evaluated once the preliminary drawings have been approved.

110 Agency Initiatives:

111 Director Jackson informed the Committee that the Performance Audit of DFS by the Office of
112 the State Inspector General (OSIG) had been suspended. The Department was notified on August
113 14, 2020 that the audit would be suspended until OSIG can contract for resources better suited to
114 analyze the technical, scientific processes used by DFS.

115 Director Jackson advised that the amendments to the Department's Regulations for the Approval
116 of Field Tests for Detection of Drugs went into effect on October 1, 2020. The amendments
117 expanded the definition of field test to include presumptive mobile instruments and set up a
118 process for the approval of presumptive mobile instruments.

119 Director Jackson announced that, on September 29, 2020, DFS completed its reviews of the data
120 from all Physical Evidence Recovery Kits tested by the private laboratory under the Sexual
121 Assault Kit Initiative (SAKI) Grant. A total of 894 kits from 78 Virginia law enforcement

agencies were sent for testing under the SAKI Grant, and 337 cases had DNA profiles uploaded for searching in the Data Bank. As of September 30th, DFS had reported 148 Data Bank hits in the SAKI cases. She also reminded the SAC of the work of staff to conduct similar reviews of kits tested under the District Attorney's Office of New York (DANY) Grant, and noted that, as of September 30th, there had been 243 hits reported in DANY cases. Director Jackson acknowledged the hard work of the 35 DNA scientists across the state who worked over 2,800 hours of overtime to complete these two projects and, in particular, Central Forensic Biology Group Supervisor Theresa Francis, who coordinated the projects for DFS.

Budget:

Director Jackson presented an overview of the DFS Budget to the Committee, including the Department's pledged savings for FY20, COVID-19 funding, new budget items that were unallocated and subsequently removed from the DFS budget, and the Department budget for FY21/FY22. She noted a hiring freeze was put in place due to COVID-19 in April, but explained that there is an exemption in place for positions directly related to public safety, which applies to DFS scientist and Evidence Receiving positions.

Grants:

Director Jackson presented a summary of DFS grants, including three grants that DFS was just notified that it had been awarded.

Workload/Backlog:

Director Jackson provided an update on statistical trends in each of the scientific disciplines, as well as turnaround times for September. She presented Q3 (July-September) statistics for 2020 as compared to the same period in 2019. Overall, case submissions were down 8%, but that decline was really driven by the 23% decrease for Controlled Substances as that section sees the largest volume of cases. For Q3 2020, the Firearms & Toolmarks, Forensic Biology, and Toxicology Sections all had an increase in submissions over Q3 2019. Director Jackson pointed out that the reduced submissions for Controlled Substances, which have occurred since the beginning of the pandemic, allowed DFS to significantly reduce its drug case backlog. At the end of September 2019, the backlog was 12,323 cases, but it was down 65% by the end of September 2020 to 4,263 cases.

Division of Technical Services Updates

Toxicology Update:

Toxicology Program Manager James Hutchings, Ph.D., informed the Committee of the Department participating in the National Governors Association Learning Collaborative on State Strategies to Strengthen and Leverage Data to Address Impaired Driving. Virginia is one of ten states involved in this initiative.

Dr. Hutchings advised that the Department had 37 staff attend the Society of Forensic Toxicologists Annual Meeting, which was held virtually in September 2020. DFS had three staff members who presented as part of the program.

160 Dr. Hutchings provided an update on implementation of the Hamilton Automated Liquid Handling
161 Systems.

162 Dr. Hutchings also provided an overview of two recently validated methods:

- 163 • Fentanyl Derivative Quantitation and Confirmation by Solid Phase Extraction
- 164 • Fentanyl Derivative Qualitative Analysis by Solid Phase Extraction

165

166 Validation documentation for the two methods was provided to the Toxicology Subcommittee
167 members for review in advance, and the Subcommittee members advised the Department that
168 they did not believe a Subcommittee meeting was necessary to discuss the documentation. Dr.
169 Edinboro made comments for the Department to consider and provided recommendations with
170 respect to validation parameters and potential interferents.

171

172 Dr. Edinboro brought up a recommendation made by the Toxicology Subcommittee at its July
173 2020 meeting. In closing its review of the validation/verification documentation for several
174 methods in July, the Subcommittee recommended, on a 3-1 vote, that the Department
175 experimentally determine the limit of detection of each compound present versus using an
176 administratively determined limit of detection concentration. Dr. Hutchings explained the
177 incorporation of new terminology to address this recommendation. Dr. Edinboro requested that
178 DFS report back at the next SAC meeting with actions taken in response to the recommendation
179 from July 2020.

180

181 Dr. Hutchings discussed recently added Toxicology methods, as well as future methods. He also
182 reviewed Toxicology statistics for 2020, noting that although there has been a reduction in vehicle
183 travel as a result of the pandemic, the volume of submissions for Toxicology cases for the first
184 half of 2020 was higher than the same period in 2019. This is true for DUI/DUID cases, as well
185 as OCME and other Toxicology cases.

186

187 Dr. Hutchings provided a staffing update on the Toxicology Program Area, which included a
188 review of staffing in the Toxicology and Breath Alcohol Sections.

189 The Breath Alcohol Section expanded its online recertification course for Breath Alcohol operators
190 due to restrictions on in-person training. The Section resumed in-person training for initial
191 operators in June 2020, but the classes are limited to 15 students to allow for social distancing.
192 This has required DFS to increase the number of classes offered. In-person recertification has
193 resumed as well.

194 Dr. Hutchings provided an update on the Breath Alcohol instrument enhancement. He also
195 reviewed statistics showing a marked reduction in the number of breath tests conducted since
196 March 2020 as compared to the same period in 2019.

197 Chemistry Program Update:

198 Chemistry Program Manager Robyn Weimer provided an update on the Chemistry Program Area.
199 She started with the Trace Evidence Section, including a staffing update, as well as education for

200 staff that was obtained through a free online symposium held in July 2020 on Current Trends in
201 Forensic Trace Analysis, which covered primer residue, paint, glass, and tape.

202 Ms. Weimer updated the Committee on report wording changes for the Trace Evidence Section
203 that are applicable to all Trace Evidence examinations that involve a comparison. This change,
204 which will occur in October 2020, implements assessments of significance into report conclusions.
205 Information about the change has been incorporated into trainings for customers so they are aware
206 that it will soon be implemented.

207 Ms. Weimer advised that there has been an increase in requests for juvenile Primer Residue cases,
208 which are required to be rushed. Comparing March through September of 2020 to the same period
209 in 2019, the volume of requests has increased 40%. These cases tend to have multiple suspects
210 which equates to a longer analysis time and can, therefore, impact turnaround time for other cases.

211 Ms. Weimer provided an update on staffing in the Controlled Substances Section, as well as the
212 approximately eight hours of training Controlled Substances staff received by attending the
213 Southwestern Association of Forensic Scientists annual meeting, which was hosted online from
214 October 5-8, 2020.

215 Ms. Weimer provided an update on the use of the Board of Pharmacy (BoP) expedited regulatory
216 scheduling process. The Department recommended 13 compounds in July 2020. These compounds
217 were considered by the BoP at its September meeting and are pending final approval.

218 Ms. Weimer concluded with an update on several validations related to the analysis of cannabis,
219 including a semi-quantitative method for non-plant material matrices for THC and full quantitative
220 method for THC using gas chromatography mass spectrometry in selected ion monitoring mode.

221 Physical Evidence Program Update:

222 Physical Evidence Program Manager Sabrina Cillessen provided the Committee with an update on
223 the Physical Evidence Program Area. She gave an overview of staffing for the Firearms &
224 Toolmarks, Latent Prints & Impressions, and Digital & Multimedia Evidence (DME) Sections.

225 The Latent Prints Section received 16 hours of training at the Virtual 2020 Chesapeake Bay
226 Division - International Association for Identification (IAI) Educational Conference.

227 For Firearms, Ms. Cillessen reported on the validation of the Cadre 3D scanner equipment and the
228 evaluation of the Uncertainty of Measurement in the Distance Determination method.

229 Ms. Cillessen gave an update on the ATF Minimum Required Operating Standards for the National
230 Integrated Ballistic Information Network (NIBIN) equipment. Two additional law enforcement
231 agencies acquired new NIBIN systems, the Richmond Police Department and the Norfolk Police
232 Department.

233 Now that the DME Section is fully staffed, the Section has been reducing its backlog. They have
234 also updated their procedures to improve turnaround times through implementation of date and
235 time filters to reduce the amount of data they are looking at and that is returned to the submitting
236 agency. The Section has also enhanced their capabilities with their existing equipment and

237 methods, including identifying key components of an iPhone that are damaged and preventing
238 charging and/or data connectivity, analyzing iPhone logs that document application usage activity,
239 and analyzing Microsoft Windows 10 “Your Phone” application.

240 Forensic Biology Program Update:

241 Alka Lohmann, Director of the Division of Technical Services (DTS), provided a staffing update
242 for the Forensic Biology program area.

243 Ms. Lohmann noted that there are four examiners in Y-STR training. She also shared information
244 on the deployment of STRmix, noting that the training of the first set of examiners continues and
245 that external training is scheduled for eight examiners.

246 Ms. Lohmann provided an update on the status of various validation projects, including STRmix
247 and new Real-Time PCR instruments.

248 Ms. Lohmann shared information on a DNA Research Grant that has been awarded to the
249 Department for an automated or semi-automated differential extraction method.

250 DNA examiners attended the Promega meeting remotely in September. A virtual National CODIS
251 meeting is scheduled in December for state and local CODIS administrators.

252 Ms. Lohmann also reported on the new Quality Assurance Standards (QAS) that went into effect
253 on July 1, 2020. DFS has updated all of its manuals and is in compliance with the new standards.
254 An external audit of DFS to the new QAS is scheduled for December 2020.

255 Ms. Lohmann advised the Committee on the Data Bank’s planned transition to a prelog, electronic
256 portal for sample information and pre-submission data. The Data Bank is expected to start testing
257 the system in the staging environment before the end of the year.

258 Division of Technical Services Update:

259 Ms. Lohmann provided a staffing update for the Division of Technical Services.

260 The Department was notified on September 25, 2020 of its successful completion of the ISO/IEC
261 17025 surveillance assessment for Testing and Calibration.

262 Ms. Lohmann advised that the 101st Forensic Science Academy class is currently in session. DFS
263 received funding from the Department of Criminal Justice Services (DCJS) for the part-time
264 Forensic Trainer position. Accordingly, three Forensic Science Academy sessions are planned for
265 2021.

266 Ms. Lohmann informed the Committee that Coronavirus Emergency Supplemental Funding
267 through DCJS will ensure the continuity of operations and safety of staff and students for Breath
268 Alcohol and Forensic Training courses. The funding will assist in moving toward paperless Breath
269 Alcohol instrument certifications and provide equipment to increase capacity for online course
270 delivery.

271 Ms. Lohmann concluded by informing the Committee of the Department's continued participation
272 in the reorganized Organization of Scientific Area Committees. Ms. Lohmann also discussed the
273 Department's involvement in standards development activities, including the ASTM E30
274 Committee on Forensic Science, and the standards developed by the AAFS Standards Board
275 (ASB), and the International Organization of Legal Metrology's R126 Recommendation on Breath
276 Alcohol Analyzers.

277 Mr. Meyers reminded the Committee that it needed to take action with respect to the validation
278 documentation for the two fentanyl derivative methods that were discussed during Dr. Hutchings'
279 presentation. After discussion, Dr. Edinboro made a motion to close the review of the validation
280 with a recommendation that the Department consider his comments and report back with
281 appropriate follow up on the comments at the next SAC meeting. Ms. St. Clair seconded the
282 motion. A roll-call vote was taken, and the Committee members voted as follows:

283 Mr. Beaty – Yes
284 Ms. Bottrell – Yes
285 Dr. Corrado – Yes
286 Dr. Cotton – Yes
287 Dr. Edinboro – Yes
288 Director Jackson – Yes
289 Dr. Maha – Yes
290 Mr. Meyers – Yes
291 Ms. Schelling – Yes
292 Ms. St. Clair – Yes
293 Mr. Zercie – Yes

294 **Old Business**

295 **Microscopic Hair Comparison Case Review:**

296 Amy Jenkins, Department Counsel, provided an update on the Microscopic Hair Comparison Case
297 Review. The Forensic Science Board's Microscopic Hair Comparison Case Review Subcommittee
298 met on September 2, 2020 to consider recommendations from the Review Team with the respect
299 to nine transcripts. Ms. Jenkins advised that the Subcommittee approved notifications with respect
300 to four of the nine transcripts. DFS is continuing to review cases for positive probative hair
301 associations to identify additional cases for the project.

302 **Future Meeting Date**

303 The Scientific Advisory Committee will meet on April 20, 2021 and October 13, 2021.

304 **Public Comment**

305 Mr. Meyers inquired whether any member of the public would like to provide any comments. No
306 member of the public provided comment.

307 **Adjournment**

308 Mr. Meyers asked for a motion to adjourn. Dr. Edinboro made a motion to adjourn the meeting of
309 the Scientific Advisory Committee, which was seconded by Mr. Zercie. A roll-call vote was taken,
310 and the members voted as follows:

311 Mr. Beaty – Yes
312 Ms. Bottrell – Yes
313 Dr. Corrado – Yes
314 Dr. Cotton – Yes
315 Dr. Edinboro – Yes
316 Director Jackson – Yes
317 Dr. Maha – Yes
318 Mr. Meyers – Yes
319 Ms. Schelling – Yes
320 Ms. St. Clair – Yes
321 Mr. Zercie – Yes

322 The meeting adjourned at 11:40 a.m.